REMARKS

In the amendment dated May 15, 2003, Applicant submitted new claims 30 and 31 reciting novel features of the present invention. The Examiner found applicant non-responsive for failing to provide specific arguments as to the allowability of new claims 30 and 31, and for failing to indicate whether claims 30 and 31 are readable upon the elected species.

Firstly, applicant confirms that claims 30 and 31 are readable on the elected species (Figs. 1a-1d). With respect to claim 30, one key structural difference is that condenser tubes and radiator tubes are in contact. In this invention, the condensation function is done by rejecting the AC Loop heat from the refrigerant to the coolant through the tubes contact. The heat is rejected afterward to the air through another radiator that is located in the front of the vehicle and that has the function to cool the coolant. Basically, no airflow is need for condensation if the AC Loop is used in refrigeration mode. The result is an improved contact between the radiator tubes and the coolant tubes, and an improved efficiency of the condensation. This structure and function is completely opposite to the Wolf module. With respect to claim 31, the efficiency of the present invention is improved, in part, because the invention provides a heat-dissipating fin 4 adjacent the refrigerant fluid circuit.

In this claimed invention, there is one mode in which we have circulation of the 3 fluids in the same time. It is the heating mode that requires use of the condenser as additional heating sources in order to increase the level of heat availability. But in this case the physical heat transfer scheme is:

- refrigerant -> coolant -> air
- or a parallel: refrigerant ->air and coolant -> air in the same time.

The serial heat transfer path described in Wolf patent does not teach or render obvious the claimed invention at all because it prohibits the condensation function. The present invention could have a heat transfer function between radiator and condenser system even without air circulation but this arrangement is very difficult in the case of Wolf system.

It is respectfully submitted that the application and claims are now believed to be in condition for allowance and notice to that effect is respectfully requested. Should the Examiner believe additional discussion would advance the prosecution of the present application, they are invited to contact the undersigned at the local telephone number listed below.

Respectfully submitted,

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